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EXAMINER

DAM, TUAN QUANG

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JEREMY ALAN ARNOLD and
JOHN MATTHEW SANTOSUOSSO

Appeal 2007-003437
Application 09/997,990
Technology Center 2100

Decided:¹ June 12, 2009

Before KENNETH W. HAIRSTON, JOSEPH F. RUGGIERO,
and JOHN A. JEFFERY, *Administrative Patent Judges*.

HAIRSTON, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

This is an appeal under 35 U.S.C. §§ 6(b) and 134 from the final rejection of claims 1 to 6, 8 to 27, and 29 to 40. In an Amendment After Final, Appellants canceled claims 1 to 6, 8 to 13, 23 to 27, 29 to 33, 38, and 39. Accordingly, claims 14 to 22, 34 to 37, and 40 remain before us on appeal.

The disclosed invention relates to a method and apparatus for tracking a number of object creations resulting from multiple creators for a class defined in an object-oriented computer program during debugging of the object-oriented computer program, and halting execution of the object-oriented computer program in response to the number of object creations meeting a condition (Fig. 7; Spec. 5, 8, 9, and 15; Abstract).

Claim 14 is representative of the claims on appeal, and it reads as follows:

14. A computer-implemented method of debugging an object-oriented computer program, the method comprising:

(a) tracking a number of object creations of a class defined in the object-oriented computer program during debugging, wherein the tracked number of object creations includes object creations resulting from multiple creators for the class; and

(b) halting execution of the object-oriented computer program in response to the number of object creations meeting a condition.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Phillips	US 5,321,828	Jun. 14, 1994
Lenkov	US 5,560,009	Sep. 24, 1996
Pardo	US 5,754,839	May 19, 1998

The Examiner rejected claims 14, 15, 17 to 22, 34, 35, and 40 under 35 U.S.C. § 103(a) based upon the teachings of Lenkov and Phillips.

The Examiner rejected claims 16, 36, and 37 under 35 U.S.C. § 103(a) based upon the teachings of Lenkov, Phillips, and Pardo.

The Examiner acknowledges (Final Rej. 9), and Appellants agree (Br. 6), that Lenkov is silent as to tracking a number of object creations and halting execution of the object-oriented computer program in response to the number of object creations meeting a condition. The Examiner states (Final Rej. 9) that Phillips discloses “tracking a number of hits for a breakpoint . . . and halting execution of the computer program in response to the number of hits meeting a condition” In view of the teachings of Phillips, the Examiner is of the opinion (Final Rej. 9 and 10) that it would have been obvious to one of ordinary skill in the art “to incorporate the teaching of *Phillips et al.* into that of *Lenkov et al.* for the inclusion of tracking a number of object creations and halting execution in response to the number meeting a condition.”

Appellants argue (Br. 8) that

[w]hile *Phillips* discloses the concept of setting a condition on a breakpoint that triggers the breakpoint only after N hits, this disclosure falls short of disclosing or suggesting the concept of tracking the number of object creations for a class that result from multiple creators, as required by each of claims 14, 34 and 40.

Based upon the teachings of Phillips, Appellants conclude (Br. 8) that “the combined teachings of *Lenkov* and *Phillips* simply fail to disclose or suggest that a number representative of object creations from multiple creators for a class be tracked, or that a condition for halting execution of a program can be tested against such a tracked number.”

Lenkov describes a debugger 320 that allows a user 1118 to set several types of breakpoints, including an instance breakpoint (i.e., a breakpoint that is recognized only if a member function is invoked with a particular object), a trigger breakpoint (e.g., a point in the object code where execution will leave the scope of the object), and a class breakpoint (i.e., a breakpoint that suspends execution of the object code whenever any of the class's member functions is invoked) (Figs. 3 and 11; col. 29, ll. 16 to 44).

Phillips describes a source level debugger 22 that is used by a system user to set breakpoints and other conditions for stopping a program (Fig. 1; col. 26, l. 39 to col. 28, l. 64). Phillips explains that a special kind of condition is a positive ignore count that permits the system to ignore a breakpoint until a set count value is decremented to zero (col. 28, l. 65 to col. 29, l. 30).

Although the debugger in Phillips halts execution of the program in response to a conditional count, it is not a count of the “number of object creations” including “object creations resulting from multiple creators for the class” as set forth in claims 14, 34, and 40 on appeal. Thus, we agree with Appellants' argument (Br. 8) that the combined teachings of the references “fail to disclose or suggest that a number representative of object creations from multiple creators for a class be tracked, or that a condition for halting execution of a program can be tested against such a tracked number.”

In summary, the obviousness rejection of claims 14, 15, 17 to 22, 34, 35, and 40 is reversed because the Examiner's articulated reasons for combining the teachings of the references to Lenkov and Phillips do not support a legal conclusion of obviousness. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007).

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The obviousness rejection of claims 16, 36, and 37 is reversed because the breakpoint counter teachings of Pardo (col. 5, ll. 37 to 50) fail to cure the noted shortcomings in the teachings of Lenkov and Phillips.

The decision of the Examiner is reversed.

REVERSED

babc

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